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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/643,172	08/21/2000	William J. Meserve	PAHTL.047A	8734

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EXAMINER

NGUYEN, DINH Q

ART UNIT PAPER NUMBER

3752

DATE MAILED: 12/02/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/643,172

Applicant(s)

MESERVE ET AL.

Examiner

Dinh Q Nguyen

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-12,15 and 17-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22,23 and 27-34 is/are allowed.
- 6) ☒ Claim(s) 1, 3-12, 15, 17-21, 24-26 is/are rejected.
- 7) ☒ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5, 6, 15, 17-19, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (of record) in view of Wilbur.

Miller teaches all the limitations of the claims except for the drying agent that comes in contact with the fire extinguisher fluid inside the fire extinguisher bottle. Wilbur discloses a fire extinguisher bottle 24 with a wire mesh container 12 within a removable container 2 (figure 2). The fire extinguisher fluid within the container 24 comes in contact with the powder material contained within the wire mesh container 12 before exiting out through conduit 46 (figure 1). Therefore, It would have been obvious to one having ordinary skill in the art to configure the device of Miller with a removable wire mesh container within a fire extinguisher bottle as suggested by Wilbur, since it would provide a way for the fluid extinguisher within the fire extinguisher bottle to come in contact with a substrate. With one skilled in the art, in order to prevent freezing at the extinguisher outlet, it would be obvious to have the substrate as a drying agent contained inside a extinguisher bottle so the extinguishing fluid could come in contact with the substrate as Wilber taught.

3. Claims 3, 8, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (of record) in view of Wilbur as applied to claims 1, 5, 6, 13-15, 17-19, 24 and 25 above, and further in view of Birk.

Miller in view of Wilbur teaches all the limitations of the claims except for bromotrifluoromethane or halocarbon extinguisher fluid. Birk discloses bromotrifluoromethane or halocarbon as the extinguisher fluid (column 1, lines 25-64). It would have been obvious to one having ordinary skill in the art to have provided the device of Miller and Wilbur with bromotrifluoromethane or halocarbon as the extinguisher fluid as suggested by Birk, since it would provide the most efficient fire suppression agents (column 1, lines 35-36).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (of record) in view of Wilbur as applied to claims 1, 5, 6, 13-15, 17-19, 24 and 25 above, and further in view of Tsuchiya.

Miller in view of Wilbur teaches all the limitations of the claims except for a zeolite-drying agent. However, Tsuchiya discloses of using zeolite as a drying agent in a refrigerator fluid. Therefore, it would have been obvious to one having ordinary skill in the art to have provided the device of Miller and Wilbur with a zeolite-drying agent as suggested by Tsuchiya. Doing so would provide a drying agent to a fluid medium.

5. Claims 7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (of record) in view of Wilbur as applied to claims 1, 5, 6, 13-15, 17-19, 24 and 25 above.

With respect to claim 7, Miller in view of Wilbur discloses the claimed invention except for the fire extinguisher fluid, which is in contact with a drying agent for at least 2 days. It would have been obvious to one having ordinary skill in the art at the time of the invention

was made to configure the device of Miller and Wilbur with a drying agent being contacted with the fire extinguisher fluid for at least 2 days, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

With respect to claim 10, Miller in view of Wilbur discloses the claimed invention except for the fire extinguisher fluid contains less than 40 ppm of water. It would have been obvious to one having ordinary skill in the art at the time of the invention was made to have provided the device of Miller and Wilbur with the fire extinguisher fluid contains less than 40 ppm of water, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

6. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (of record) in view of Wilbur as applied to claims 1, 5, 6, 13-15, 17-19, 24 and 25 above, and further in view of Drobyshev.

Miller in view of Wilbur teaches all the limitations of the claims except for granules, blocks or bars zeolite. However, Drobyshev discloses granules, blocks or bars zeolite being used as a drying agent for a fire extinguisher. Therefore, it would have been obvious to one having ordinary skill in the art to have provided the device of Miller and Wilbur with granules, blocks or bars zeolite as suggested by Drobyshev. Doing so would provide a way to introduce different types of drying agents to a fire extinguisher.

7. Claims 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (of record) in view of Wilbur as applied to claims 1, 5, 6, 13-15, 17-19, 24 and 25 above.

With respect to claim 20, Miller in view of Wilbur teaches all the limitations of the claims except for a stainless steel wire mesh container. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide the Miller and Wilbur device with a stainless steel wire mesh container because Applicant has not disclosed that a wire mesh container made of stainless steel provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the wire mesh container taught by Wilbur or the claimed stainless steel wire mesh container because both container perform the same function of providing container for a chemical material. Furthermore, using stainless steel container in a chemical environment is obvious for preventing corrosion.

Therefore, it would have been an obvious matter of design choice to modify the device of Miller and Wilbur to obtain the invention as specified in claim 20.

With respect to claim 21, in the absence of any specific functional statement of use, it would have been obvious to provide the device of Miller and Wilbur with any form of flexible projection.

8. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller (of record) in view of Wilbur as applied to claims 1, 5, 6, 13-15, 17-19, 24 and 25 above.

Miller in view of Wilbur teaches all the limitations of the claims except for a 3A or 4A molecular sieve. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide the Miller and Wilbur device with a 3A or 4A molecular sieve because Applicant has not disclosed that a 3A or 4A

molecular sieve provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the molecular sieve taught by Wilbur or the claimed 3A or 4A molecular sieve because both molecular sieve perform the same function of absorbing water. Therefore, it would have been an obvious matter of design choice to modify the device of Miller and Wilbur to obtain the invention as specified in claim 26.

***Allowable Subject Matter***

9. Claims 22-23, and 27-34 are allowed
10. Claims 28 and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

11. Applicant's arguments filed August 20, 2003 have been fully considered but they are not persuasive. Miller using a molecular sieve to absorb water content in the fire extinguisher fluid Halon to prevent freezing nozzle of the fire extinguishing bottle. With one skilled in the art, in order to prevent freezing at the extinguisher outlet, one should place a substrate as a drying agent inside a extinguisher bottle so the extinguishing fluid could come in contact with the substrate as Wilber taught, even though Wilbur patent is issued in 1908, The Wilbur patent teaching of a way to introduce a substance into a fire extinguisher bottle, thus the teaching of Wilbur is obvious to one skilled in the art to provide a drying agent that could absorb water content within the fire-extinguishing bottle and prevent freezing of the outlet.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dinh Q Nguyen whose telephone number is (703) 305-0248. The examiner can normally be reached on Monday-Friday 6:30-4:00 alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mar can be reached on (703) 308-2087. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0861.

A handwritten signature in black ink, appearing to read 'Dinh Q Nguyen', with a stylized, cursive script.

Dinh Q Nguyen  
Patent Examiner  
Art Unit 3752

dqn